Alternative Ground Decontamination Works at the Proposed Kennedy Town Comprehensive Development Area Site Environmental Impact Assessment Report



Appendix 4.5 Mitigated Construction Plant Inventory

PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Screening Effect, dB(A)	Noise Mitigation Measures	Total SWL, dB(A)
Kennedy Town CDA Decontamination Works	•		•	•			
Activity 1 - Preliminaries	CND 000	1 400	1 4	F00/	10	Maurilla Damian	00
Air compressor, air flow > 10m3/min and <= 30m3/min Breaker, mini-robot mounted	CNP 002	102 115	1 1	50% 50%	-10 -10	Movable Barrier Movable Barrier	89 102
Dump truck (50 t)	BS 5228 D.9/39	103	1	30%	-10	Movable Damei	98
Welding plant	[2]	78	1	50%	-10	Movable Barrier	65
Cutter, circular, steel (electric)	[1]	112	2	70%	-10	Movable Barrier	103
Saw, circular, wood	CNP 201	108	1	50%	-10	Movable Barrier	95
Crane, mobile (QPME)	EPD- 01516	101	1	50%	-5	Movable Barrier	93
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1 Total SW	100% /L, dB (A)	-10	Movable Barrier	85 107
Activity 2 - Excavation & Cement Solidification							
Group 1							
Piling, vibrating hammer	[1]	115	1	50%	-10	Noise Insulating Fabric	102
Dump truck (50 t)	BS 5228 D.9/39	103	2	30%		Mauahla Dawian	101
Excavator, wheeled/tracked (QPME) Generator, super silenced, 70 dB(A) at 7 m	EPD- 01230 CNP 103	99 95	6 1	50% 100%	-5 -10	Movable Barrier Movable Barrier	99 85
Water pump (electric)	CNP 103 CNP 281	88	6	100%	-10	Movable Barrier	86
Saw, circular, wood	CNP 201	108	4	50%	-10	Movable Barrier	101
Welding plant	[2]	78	4	50%	-10	Movable Barrier	71
			Total SW	/L, dB (A)			107
Group 2 Piling, large diameter bored, grab and chisel	CNP 164	115	1	40%	-10	Noise Insulating Fabric	101
Piling, large diameter bored, grab and chisel Piling, large diameter bored, oscillator	CNP 164 CNP 165	115	1	40%	-10	Noise Insulating Fabric	101 101
Piling, large diameter bored, reverse circulation drill	CNP 166	100	1	40%	-10	Noise Insulating Fabric	86
Piling, earth auger, auger	CNP 167	114	1	40%	-10	Noise Insulating Fabric	100
Dump truck (50 t)	BS 5228 D.9/39	103	1	30%		,	98
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	5	50%	-5	Movable Barrier	98
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Water pump (electric)	CNP 281	88	6	100%	-10	Movable Barrier	86
Saw, circular, wood	CNP 201	108	2	50%	-10	Movable Barrier	98
Welding plant	[2]	78	4 T-+-I CVA	50%	-10	Movable Barrier	71
		Max		/L, dB (A) /L, dB (A)			107 107
Activity 3 - Foundation							
Dump truck (50 t)	BS 5228 D.9/39	103	4	30%	I		104
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	8	50%	-5	Movable Barrier	100
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Water pump (electric)	CNP 281	88	6	100%	-10	Movable Barrier	86
Saw, circular, wood	CNP 201	108	4	50%	-10	Movable Barrier	101
Welding plant	[2]	78	4 Total SW	50% /L, dB (A)	-10	Movable Barrier	71 107
			Total OT	, L, GD (71)	L		101
Activity 4 - Form Biopile Dump truck (50 t)	BS 5228 D.9/39	103	2	30%	<u> </u>		101
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	6	50%	-5	Movable Barrier	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-5 -10	Movable Barrier	85
Water pump (electric)	CNP 281	88	6	100%	-10	Movable Barrier	86
Saw, circular, wood	CNP 201	108	4	50%	-10	Movable Barrier	101
Welding plant	[2]	78	4	50%	-10	Movable Barrier	71
			Total SW	/L, dB (A)			105
Activity 5 - Operate Biopile	0110 100			40001	40		
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	-10	Movable Barrier	88
Ventilation fan	CNP 241	108	2 Total SW	100% /L, dB (A)	-10	Movable Barrier	101 101
Activity 6 - Decommission Biopile							
Dump truck (50 t)	BS 5228 D.9/39	103	2	30%			101
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	6	50%	-5	Movable Barrier	99
			Total SW	/L, dB (A)			103
Activity 7 - Reinstate							
Dump truck (50 t)	BS 5228 D.9/39	103	4	30%			104
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	8	50%	-5	Movable Barrier	100
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Water pump (electric)	CNP 281	88	6	100%	-10	Movable Barrier	86
Saw, circular, wood Welding plant	CNP 201 [2]	108 78	4	50% 50%	-10 -10	Movable Barrier Movable Barrier	101 71
vv Graing Plant	[4]	10		/L, dB (A)	-10	INIOVADIE DAITIEI	107
				, (-)	•		

PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Screening Effect, dB(A)	Noise Mitigation Measures	Total SWL, dB(A)
Kennedy Town CDA Decontamination Works	•		•	•	•		
Activity 8 - Reprovision of RCP					<u> </u>		
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	4	50%	-5	Movable Barrier	97
Roller, vibratory (QPME)	EPD- 00591	105	2	50%	-5	Movable Barrier	100
Poker, vibratory, hand-held (electric)	[1]	102	2	50%	-5	Movable Barrier	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Bar bender and cutter (electric)	CNP 021	90	2	50%	-10	Movable Barrier	80
Saw, circular, wood	CNP 201	108	2	50%	-10	Movable Barrier	98
			Total SW	L, dB (A)			104
Activity 9 - Reprovision of Car Park							
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	4	50%	-5	Movable Barrier	97
Roller, vibratory (QPME)	EPD- 00591	105	2	50%	-5	Movable Barrier	100
Poker, vibratory, hand-held (electric)	[1]	102	2	50%	-5	Movable Barrier	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Bar bender and cutter (electric)	CNP 021	90	2	50%	-10	Movable Barrier	80
Saw, circular, wood	CNP 201	108	2	50%	-10	Movable Barrier	98
,		1		L, dB (A)			104
Activity 10 - Reprovision of Temporary Garden							
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	4	50%	-5	Movable Barrier	97
Roller, vibratory (QPME)	EPD- 00591	105	2	50%	-5	Movable Barrier	100
Poker, vibratory, hand-held (electric)	[1]	102	2	50%	-5	Movable Barrier	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-10	Movable Barrier	85
Bar bender and cutter (electric)	CNP 021	90	2	50%	-10	Movable Barrier	80
Saw, circular, wood	CNP 201	108	2	50%	-10	Movable Barrier	98
Saw, onodiai, wood	0141 201	100		/L, dB (A)	10	Wovable Barrier	104
	_						
Planned Residential Development / Planned Developme Activity 1 - Demolition	nt						
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	1 1	50%	-10	Movable Barrier	89
Breaker, mini-robot mounted	[1]	115	1	50%	-10	Movable Barrier	102
Dump truck (50 t)	BS 5228 D.9/39	103	1	30%	-10	Wovable Barrier	98
Welding plant	[2]	78	1	50%	-10	Movable Barrier	65
Cutter, circular, steel (electric)	[1]	112	2	70%	-10	Movable Barrier	103
Saw, circular, wood	CNP 201	108	1	50%	-10	Movable Barrier	95
Crane, mobile (QPME)	EPD- 01516	100	1	50%	-10 -5	Movable Barrier	93
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	-5 -10		95 85
Generator, Super Silenceu, 70 db(A) at 7 m	CINE 103	95		/L, dB (A)	-10	Movable Barrier	107
					•		
Activity 2 - Foundation		_	_	_			
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	8	50%	-5	Movable Barrier	100
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	3	100%	-10	Movable Barrier	90
Breaker, mini-robot mounted	[1]	115	1	50%	-10	Movable Barrier	102
Dump truck (50 t)	BS 5228 D.9/39	103	4	30%			104
Water pump (electric)	CNP 281	88	4	100%	-10	Movable Barrier	84
			Total SW	/L, dB (A)			107
Activity 3 - Sub-structure							
Generator, standard	CNP 101	108	2	100%	-10	Movable Barrier	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	50%	-10	Movable Barrier	92
Piling, large diameter bored, reverse circulation drill	CNP 166	100	2	100%	-10	Noise Insulating Fabric	93
Excavator, wheeled/tracked (QPME)	EPD- 01230	99	2	50%	-5	Movable Barrier	94
Bar bender and cutter (electric)	CNP 021	90	2	50%	-10	Movable Barrier	80
Crane, mobile (QPME)	EPD- 01516	101	1	50%	-5	Movable Barrier	93
Lorry (20 t)	BS 5228 D.9/19	102	2	50%			102
Dump truck (50 t)	BS 5228 D.9/39	103	2	30%			101
Concrete lorry mixer	CNP 044	109	1	50%			106
			4	50%	-5	Movable Barrier	100
Poker, vibratory, hand-held (electric)		102	4				101
	[1]	102 109			-5	Movanie Barrier	
Concrete pump, stationary/ lorry mounted	[1] CNP 047	109	1	50%	-5 -10	Movable Barrier Movable Barrier	81
Concrete pump, stationary/ lorry mounted	[1]		1 2		-5 -10	Movable Barrier Movable Barrier	81 110
Concrete pump, stationary/ lorry mounted Nater pump (electric)	[1] CNP 047	109	1 2	50% 100%			
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure	[1] CNP 047 CNP 281	109 88	1 2 Total SW	50% 100% /L, dB (A)	-10	Movable Barrier	110
Poker, vibratory, hand-held (electric) Concrete pump, stationary/ lorry mounted Water pump (electric) Activity 4 - Superstructure Generator, standard	[1] CNP 047 CNP 281	109 88	1 2 Total SW	50% 100% /L, dB (A) 100%	-10 -10	Movable Barrier Movable Barrier	110 101
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure Generator, standard Piling, large diameter bored, reverse circulation drill	[1] CNP 047 CNP 281 CNP 101 CNP 166	109 88 108 100	1 2 Total SW 2 2	50% 100% /L, dB (A) 100% 100%	-10 -10 -10	Movable Barrier Movable Barrier Noise Insulating Fabric	110 101 93
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure Generator, standard Piling, large diameter bored, reverse circulation drill Crane, mobile (QPME)	[1] CNP 047 CNP 281 CNP 101 CNP 166 EPD- 01516	109 88 108 100 101	1 2 Total SW 2 2 1	50% 100% /L, dB (A) 100% 100% 50%	-10 -10	Movable Barrier Movable Barrier	110 101 93 93
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure Generator, standard Piling, large diameter bored, reverse circulation drill Crane, mobile (QPME) Concrete lorry mixer	[1] CNP 047 CNP 281 CNP 101 CNP 166 EPD- 01516 CNP 044	109 88 108 100 101 109	1 2 Total SW 2 2 1 1 1	50% 100% /L, dB (A) 100% 100% 50% 50%	-10 -10 -10 -5	Movable Barrier Movable Barrier Noise Insulating Fabric Movable Barrier	110 101 93 93 106
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure Generator, standard Piling, large diameter bored, reverse circulation drill Crane, mobile (QPME) Concrete lorry mixer Poker, vibratory, hand-held (electric)	[1] CNP 047 CNP 281 CNP 101 CNP 166 EPD- 01516 CNP 044 [1]	109 88 108 100 101 109 102	1 2 Total SW 2 2 1	50% 100% /L, dB (A) 100% 100% 50% 50% 50%	-10 -10 -10 -5 -5	Movable Barrier Movable Barrier Noise Insulating Fabric	110 101 93 93
Concrete pump, stationary/ lorry mounted Nater pump (electric) Activity 4 - Superstructure Generator, standard Piling, large diameter bored, reverse circulation drill Crane, mobile (QPME) Concrete lorry mixer	[1] CNP 047 CNP 281 CNP 101 CNP 166 EPD- 01516 CNP 044	109 88 108 100 101 109	1 2 Total SW	50% 100% /L, dB (A) 100% 100% 50% 50%	-10 -10 -10 -5	Movable Barrier Movable Barrier Noise Insulating Fabric Movable Barrier	110 101 93 93 106

Note: [1] Extracted from EPD document namely, "Sound Power Levels of Other Commonly Used PME"

http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf

[2] SWL of Welding set is referred to the Appendix 5.1 of approved EIA Report of Hong Kong Section of Guangzhou - Shenzhen - Hong Kong Express Rail Link